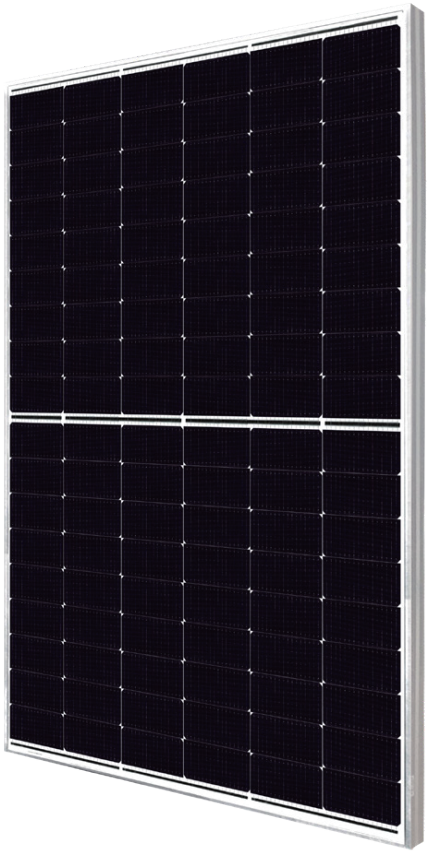
# 182 N-TYPE

# ZHONGXING

## 108 half-cell

## 425-450W

16BB half-cut n-type Double Glass Bifacial Modules



n-Bycium+ 16BB

MBB Half-Cell Technology

**23.04%**

Up To

Cell Conversion Efficiency

## KEY FEATURES

### 16BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss
Ga dopped wafer, attenuation＜2% (1st year) / ≤0.45% (Linear)

### Industry leading high yield

Bifacial N-type cell technology,
5%-25% more yield depends on different conditions

### Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD

### Wider application

No water-permeability and high wear-resistance,
can be widely used in high-humid, windy and dusty area

### IP68 junction box

High waterproof level

## SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015
- CE
- TUV

SGS TÜV SAAR IEC 61215 IEC 61730 Periodical Inspection www.sgs-tuev-saar.com PVC211226

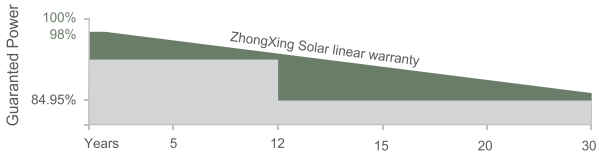
c UL us LISTED

CE

## PERFORMANCE WARRANTY

Linear Performance Warranty

Standard Performance Warranty




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# ZHONGXING SOLAR

**Dimensions: 1722*1134*30mm**
**Power : 425-450W**

## ELECTRICAL DATA | STC*

| CS6R | 425T | 430T | 435T | 440T | 445T | 450T |
|---|---|---|---|---|---|---|
| Nominal Max. Power (Pmax) | 425 W | 430 W | 435 W | 440 W | 445 W | 450 W |
| Opt. Operating Voltage (Vmp) | 31.8 V | 32.0 V | 32.2 V | 32.4 V | 32.6 V | 32.8 V |
| Opt. Operating Current (Imp) | 13.37 A | 13.44 A | 13.51 A | 13.59 A | 13.66 A | 13.72 A |
| Open Circuit Voltage (Voc) | 38.8 V | 39.0 V | 39.2 V | 39.4 V | 39.6 V | 39.8 V |
| Short Circuit Current (Isc) | 13.78 A | 13.86 A | 13.94 A | 14.01 A | 14.09 A | 14.16 A |
| Module Efficiency | 21.8% | 22.0% | 22.3% | 22.5% | 22.8% | 23.0% |
| Operating Temperature | -40°C ~ +85°C | | | | | |
| Max. System Voltage | 1500V (IEC/UL) or 1000V (IEC/UL) | | | | | |
| Module Fire Performance | TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730) | | | | | |
| Max. Series Fuse Rating | 25 A | | | | | |
| Protection Class | Class II | | | | | |
| Power Tolerance | 0 ~ + 10 W | | | | | |

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

## MECHANICAL DATA

| Specification | Data |
|---|---|
| Cell Type | TOPCon cells |
| Cell Arrangement | 108 [2 X (9 X 6) ] |
| Dimensions | 1722 × 1134 × 30 mm (67.8 × 44.6 × 1.18 in) |
| Weight | 21.3 kg (47.0 lbs) |
| Front Cover | 3.2 mm tempered glass with anti-reflective coating |
| Frame | Anodized aluminium alloy, |
| J-Box | IP68, 3 bypass diodes |
| Cable | 4 mm² (IEC), 12 AWG (UL) |
| Connector | T6 or MC4 or MC4-EVO2 or MC4-EVO2A |
| Cable Length (Including Connector) | Portrait: 300 mm (11.8 in) (+) / 200 mm (7.9 in) (-); landscape: 1100 mm (43.3 in)* |
| Per Pallet | 35 pieces |
| Per Container (40' HQ) | 910 pieces or 840 pieces (only for US & Canada) |

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

## ELECTRICAL DATA | NMOT*

| CS6R | 425T | 430T | 435T | 440T | 445T | 450T |
|---|---|---|---|---|---|---|
| Nominal Max. Power (Pmax) | 321 W | 325 W | 329 W | 333 W | 337 W | 340 W |
| Opt. Operating Voltage (Vmp) | 30.1 V | 30.3 V | 30.4 V | 30.6 V | 30.8 V | 31.0 V |
| Opt. Operating Current (Imp) | 10.69 A | 10.75 A | 10.81 A | 10.87 A | 10.92 A | 10.98 A |
| Open Circuit Voltage (Voc) | 36.7 V | 36.9 V | 37.1 V | 37.3 V | 37.5 V | 37.7 V |
| Short Circuit Current (Isc) | 11.11 A | 11.18 A | 11.24 A | 11.30 A | 11.36 A | 11.42 A |

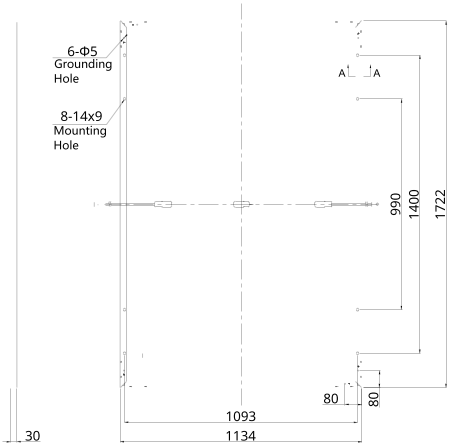
* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

## TEMPERATURE CHARACTERISTICS

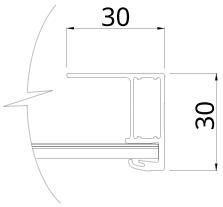
| Specification | Data |
|---|---|
| Temperature Coefficient (Pmax) | -0.29 % / °C |
| Temperature Coefficient (Voc) | -0.25 % / °C |
| Temperature Coefficient (Isc) | 0.05 % / °C |
| Nominal Module Operating Temperature | 41 ± 3°C |

## ENGINEERING DRAWING (mm)

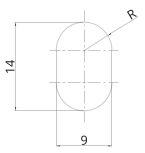
### Rear View



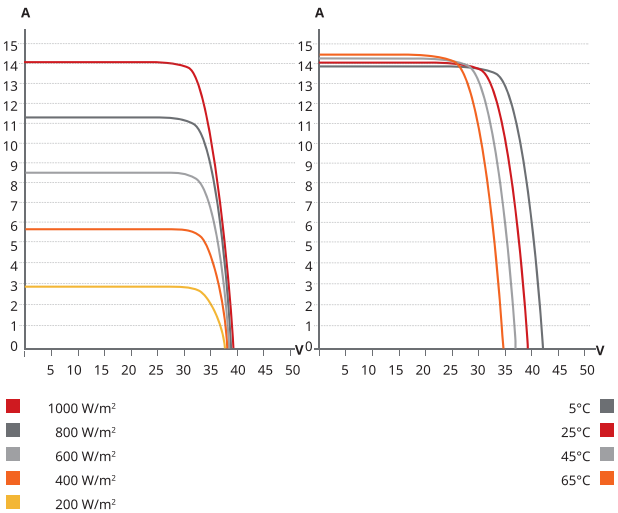

### Frame Cross Section A-A




### Mounting Hole




## CS6R-440T / I-V CURVES




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